



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: G. Gundling

Group Art No.: 1656

Application No.: 09/470,944

Examiner: A. Spiegler

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Title: NUCLEIC ACID ISOLATION  
METHOD AND KIT

Case No.: 6653.US.01

Assistant Commissioner for Patents  
Washington, D.C. 20231

SECOND ATTACHMENT TO AMENDMENT A  
VERSION WITH MARKINGS TO SHOW CHANGES  
TO PREVIOUSLY PENDING CLAIMS

Pursuant to 37 C.F.R. § 1.121, applicants provide herein marked-up copies of each claim that was pending prior to the entry of, and amended by way of, Amendment A.

1. (Amended) A method for separating nucleic acid from a test sample comprising:
  - a) contacting a test sample with a metal oxide support material [with] and a binding buffer to form nucleic acid/metal oxide complexes, wherein the binding buffer comprises a chaotropic agent and a detergent;
  - b) separating the complexes from the test sample; and

- c) eluting the nucleic acid from the metal oxide support material, thereby separating the nucleic acid from the test sample.
9. (Amended) The method of claim 7 wherein the nucleic acid is separated from a test sample comprising more than one source of nucleic acid [comprises nucleic acid from distinct sources].
10. (Amended) The method of claim 9 wherein the nucleic acid separated from the test sample comprises [is] RNA and DNA.
11. (Amended) A kit for separating nucleic acid from a test sample comprising:
- a) metal oxide particles, wherein the metal oxide particles are capable of forming nucleic acid/metal oxide complexes when the metal oxide particles are contacted with nucleic acids;
  - b) a binding buffer comprising
    - (i) a chaotropic reagent, and
    - (ii) a detergent; and
  - c) an elution buffer comprising water.